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ABSTRACT

The "Building Bridges" Leadership/Mentor Project developed a model leadership intern experience with emphasis on minority group involvement. It had four goals: to foster an environment in which cultural diversity was understood and valued; to increase work force participation of minority groups; to provide opportunities for leadership mentoring and role modeling; and to enhance employability and career success in the food and agricultural sciences. A mentor handbook and intern experience notebook were developed. The 13 interns who were recruited received 6 college credit hours in agricultural and extension or home economics education, tuition waiver, living stipend, and travel reimbursement. Mentors received a stipend. Prior to the 8-week onsite experience, mentors and interns participated in an orientation meeting, site visit, and 1-week leadership seminar. During the experiential component of the project, mentors provided day-to-day support to interns as they completed required activities. Students returned to campus to participate in a post-field experience seminar. The Youth Leadership Life Skills Development Scale was administered as a pretest/posttest. Findings indicated that, for the 1994 interns, increases in frequency were seen in 26 life skills; in 1995, only seven life skills showed an increase in mean frequency. Mentors thought this was a valuable opportunity for professional growth and renewal. Students found it a very valuable career awareness activity that provided personal and professional development. (YLB)

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Building Bridges

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Modeling Leadership Development for a Diverse Workforce in Food and Agriculture

FINAL REPORT

of

Higher Education Challenge Grant Proposal No. 9203317

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Final Report
of
Higher Education Challenge Grant Proposal No. 9203317

Modeling Leadership Development for a Diverse Workforce in Food and Agriculture

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Introduction

The "Building Bridges" Leader/Mentor Project was a joint endeavor of educators in the College of Agriculture and Home Economics and the New Mexico Cooperative Extension Service. All project personnel were New Mexico State University faculty. The three-year project was funded jointly by a United States Department of Agriculture (USDA) Higher Education Challenge Grant and the New Mexico Cooperative Extension Service. The Cooperative Extension Service in New Mexico served as the organizational model for implementing this project. Thirteen Cooperative Extension faculty were selected as mentors and matched with undergraduate students majoring in food and agriculture. Students participated in an eight-week internship experience in a county Extension office in both 1994 and 1995. Seven students took part in 1994 and six in 1995. Specific steps in the project development and implementation are addressed in the following sections.

Purpose

The purpose of this project was to develop a model leadership intern experience with emphasis on involvement of internship participants from minority groups. The major goal of this project was to provide an undergraduate experiential leadership development opportunity that:

- fosters an environment in which cultural diversity is understood and valued,
- increases work force participation of minority groups,
- provides opportunities for leadership mentoring and role modeling, and
- enhances employability and career success in the food and agricultural sciences.

Curriculum Development

The current literature on leadership, diversity, experiential learning, mentoring, and internships was reviewed. Existing mentoring models were also researched. Two major curricular

resources were developed for this project: a Mentor Handbook and an Intern Experience Notebook. Additional curriculum and resources were developed and utilized in a pre-internship Leadership Seminar and a Post-experience Seminar that will be discussed later.

Mentor Handbook - A twenty-five page handbook was developed for individuals serving as project mentors. Contents of the handbook included a description of the project goals, and definitions, expectations, and benefits of mentoring. Also included were expectations of the student intern, and guidelines for intern supervision and evaluation. The Mentor Handbook was assessed for face and content validity by New Mexico and Texas Cooperative Extension Agents who have had previous experience supervising student interns. Ideas and suggestions were incorporated into the final handbook.

Intern Experience Notebook - Student expectations were outlined, and a form was provided for students and mentors to identify specific goals for the eight-week field experience. The following six specific learning objectives for the student experience were identified:

1. To analyze leadership practices used in CES or community programs.
2. To analyze interactions among CES personnel.
3. To develop a variety of communication skills necessary for leadership in teaching, media presentations, volunteer recruitment, and personal interactions with diverse audiences.
4. To give evidence of the leadership role of county faculty in establishing and maintaining community/county/state linkages and networks.
5. To plan, execute and evaluate a leadership development program, activity, or event that meets a county need for youth or adults.
6. To evaluate the " Building Bridges" Leader/Mentor Project.

The Intern Experience Notebook provided student interns with the necessary forms and information to complete the learning objectives during the eight-week field experience. Face and content validity of the Intern notebook were assessed, using New Mexico State University students with previous student intern experience with the Cooperative Extension Service and CES agents. The Intern Experience Notebook was distributed to both mentors and interns.

Recruitment and Selection of Mentors and Interns

Recruitment and Project Promotion - A variety of recruitment and promotion techniques and strategies were utilized. Individual meetings were held with key university personnel (i.e., Associate

Vice President for Academic Affairs, Directors of Minority Student Programs) to ensure project awareness and support. Posters and brochures, that explained the program and provided information on how to apply, were developed and placed around campus. Personal contacts were made by project planners with both potential mentors and interns. Recruitment letters were also sent. To encourage diversity, minority students enrolled in the College of Agriculture and Home Economics were sent individual letters and brochures. All 82 Cooperative Extension agents in New Mexico were sent a letter and mentor application.

Selection - Separate application forms were developed for mentors and interns. Eligibility for student selection included: a minimum GPA of 2.5, completion of NMSU basic skills course (English and Math), and completion of 21 semester credit hours in technical subject matter related to agriculture/home economics. In addition, students submitted a completed application form, a current transcript of grades, three letters of reference and a career statement. After the due date, all applicants were screened to determine if the candidates met all of the project requirements. Each applicant who met the specified guidelines, participated in a 30-minute interview with the project personnel. Final selection of the interns was made from the combination application/interview process.

Interested CES agents were required to complete an application to be considered as mentors. Mentor applications required support from the agent's immediate supervisor. After intern selections were made, mentors were selected. Considerations for matching mentors and interns included subject matter expertise, program area of responsibility, professional attitude, personal interests, and previous field experiences with students. Mentors and students were notified by mail of their selection. Those not selected received a letter and were thanked for their interest.

Thirteen mentors and interns were selected to participate. A gender and racial/ethnic distribution of mentors and interns is seen in Table 1.

Table 1: Gender and Ethnicity Profile of Mentors and Interns

	RACE/ETHNICITY		GENDER	
	White	Hispanic	Male	Female
MENTORS	11	2	7	6
INTERNS	7	6	4	9

Students selected to participate in the Leader/Mentor project received six college credit hours in agricultural and extension education or home economics education, a tuition waiver, a $2000 living stipend, and travel reimbursement. Mentor offices received a $200 stipend.

Pre-field Experience Activities

Prior to the eight-week on-site experience, mentors and interns participated in the following three activities: an orientation meeting, a site visit, and a one-week leadership seminar.

Participant Orientation - Interns and mentors participated in separate but required orientation programs. The purpose of orientation was to review the program, schedules, expectations, requirements, and resource materials. Other information presented included registration for credit, housing arrangements for the off-campus portion of the experience, and stipend payments. Interns were administered the Youth Leadership Life Skills Development Scale (Dormody and Seevers)[1], a 30-item leadership skills inventory to assess current leadership skill level. Both mentors and interns were required to sign a contract agreeing to complete the requirements outlined for the project.

County Visit - During the university Spring Break, each intern visited his/her assigned county office. In addition to meeting the mentor, the intern had the opportunity to meet other CES faculty and staff, become familiar with the work environment, explore summer housing arrangements, and plan summer programs and intern activities. Each intern, with assistance from his/her mentor, completed a County Profile Assignment designed to gather information about the county.

[1] Dormody, T.J., Seevers, B.S. & Clason, D.L. (1993). The Youth Leadership Life Skills Development Scale: An evaluation and research tool for youth organizations. (Research Report 672). New Mexico State University, Agricultural Experiment Station.

completed a County Profile Assignment designed to gather information about the county.

Leadership Seminar - A one-week intensive leadership seminar was conducted prior to the summer experience. Panels, group activities, simulations, lectures, and case studies were utilized to address topics related to careers, understanding the Cooperative Extension Service, cultural diversity, teaching methods, leadership, communication strategies, volunteerism, and networking. Participants were provided their Intern Experience Notebook, and requirements for completion were reviewed. Mentors participated in the seminar for the last two days. Time was provided for mentors and interns to establish and share goals, plan a calendar of activities for the eight-week period and review expectations of the internship.

Eight-week Internship Experience

The experiential component of the project occurred during eight weeks in June/July of 1994 and 1995. Mentors provided day-to-day support to interns as they completed the required activities to meet the six specific learning objectives identified in the Intern Experience Notebook. Activities designed to meet the objectives included:

- attending a variety of meetings to observe and analyze leadership practices
- analyzing interactions among CES personnel and establishing community linkages and networks
- working with an Extension specialist
- preparing media releases
- handling clientele requests for assistance
- recruiting a volunteer for a specific activity
- interviewing a public official
- implementing a leadership development program, and
- presenting and evaluating an educational program.

Students documented and analyzed these activities on the forms provided in the Intern Experience Notebook. In addition to the day-to-day support provided by the mentors, personnel from the university communicated with mentors and interns by telephone, reviewed weekly reports submitted by both mentors and interns, and conducted a county visit at the mid-point of the internship.

Post-field Experience

During the first three days of August, students returned to campus to participate in a post-field experience seminar. The focus of the post seminar was on identification and discussion of key learnings and experiences from the internship. Several methods of sharing were utilized to accomplish this goal, including a poster presentation for college administrators and Cooperative Extension specialists, and a personal interview with each intern. Interns were first administered a post assessment of the leadership skills inventory (YLLSDS) taken during the orientation meeting to assess any changes in leadership skills. At the conclusion of the post-experience seminar, a second post assessment of the YLLDSDS asked intern perceptions of the degree of gain they experienced on the leadership skills.

PROJECT EVALUATION

Data Collection Procedures

The overall evaluation of this three-year project was accomplished using multiple approaches. Quantitative and qualitative data were collected to evaluate process and results.

Intern performance - Interns selected for this project received six credit hours graded on the standard academic rating scale (A-F). Final evaluations were based on number of required items completed and on accuracy and quality of completion. Components evaluated for each intern were:

- completion of Intern Experience Notebook (50%)
- completion of the County Profile (10%)
- self-evaluation based on a competency profile (10%)
- mentor evaluation based on a competency profile (10%)
- submission of weekly reports (10%), and
- participation in pre and post seminars (10%)

The Intern Experience Notebook documented completion of the required activities and projects. The four-page County Profile required students to use multiple resources (i.e., census data, agricultural statistics, etc.) to answer questions about the economic, social, educational, and demographic characteristics in their assigned county. Additionally each intern submitted a weekly

report through electronic mail to one of the project personnel. Weekly reports provided a means for regular contact as well as an assessment of progress toward completion of required assignments.

A checklist of 19 competencies for Extension professionals was developed. In 1979, a national study reported on the development of performance evaluation procedures for the Cooperative Extension Service. (Hahn)[2] That study identified specific competencies that every CES professional should possess and provided the framework for the measurement instrument used in this project. Some competencies included were communication skills, ability to work with others, planning skills, and initiative. Each competency was rated as excellent, good, or needs improvement. Mentors and interns independently completed the competency checklist and submitted a narrative statement to support the ratings.

Leadership Development - The Youth Leadership Life Skills Development Scale (YLLSDS) (Dormody and Seevers) was used. Content and face validity for the YLLSDS has been previously established by a panel of experts. Reliability assessment for the scale produced a Cronbach's coefficient alpha of .98. The 30-indicator Likert-type scale was administered to interns before and after the eight-week field experience to measure frequency and gain in leadership skills. Pre-and-post assessments indicated the frequency with which interns practiced each item. Options included: 0 = rarely, 1 =sometimes, 2= often, and 3 = almost always. Differences between pre and post assessments on the 30-item scale were calculated and averaged. A second post assessment utilizing the same 30 leadership life skills indicators asked intern perceptions of the degree of gain they experienced on the leadership skills as a result of their involvement in the "Building Bridges" project. Each item was rated as 0 = No Gain, 1 = Slight Gain, 2 = Moderate Gain, and 3 = A Lot of Gain.

Project Evaluation - Separate overall project evaluation forms were developed for mentors and interns. On a Likert-type scale respondents were asked to evaluate their perceived **value** of 34 components or sub-components of the internship program (i.e., promotion, seminar, activities).

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[2] Hahn, Clifford, P. (1979, May). Development of Performance Evaluation and Selection Procedures for the Cooperative Extension Services: Summary Report. Washington, D.C.: American Institutes for Research. Prepared for the U.S. Department of Agriculture. Contract Number 12-05-300-372.

Participants rated each component as very valuable, valuable, somewhat valuable, or not valuable. In addition, participants rated each of the required activities in the Intern Experience Notebook in terms of **quantity** of work experienced. A three-point, Likert-type scale with the descriptors " about right," "too little," and "too much" was used to assess quantity of work.

Qualitative assessments were also made. Individuals were provided space to respond with comments on each section of the final written evaluations. Two additional questions were asked. The first question asked respondents if they felt the project was worthwhile and to explain their response. The second question asked for ideas and suggestions for program improvement. Additional qualitative data were available in the form of quotes from interns captured on videotape during post experience sharing.

FINDINGS AND CONCLUSIONS

Intern Performance

All thirteen interns selected completed the experience (seven in 1994, and six in 1995). Final evaluations of student performance based on the previously identified criterion ranged from A to C grades for six credit hours. Students were not given a high grade based solely on participation. Completeness, accuracy, and quality of assignments were factors considered.

Leadership Development

On the 30-item Youth Leadership Life Skills Development Scale, pre-to-post mean frequencies were assessed by calculating the difference between pre-and-post assessment frequency values. For the 1994 interns, increases in frequency were seen in 26 of the 30 life skills, indicating that involvement in the internship experience provided students the opportunity to practice and develop leadership skills. The remaining four items showed no change. In 1995, only 7 of the 30 life skills showed an increase in mean frequency. The 1995 interns also had higher scores on both the pre and post assessments.

A comparison of the items with the greatest increases in mean frequencies for 1994 and 1995 follows:[3]

1994	1995
Create an atmosphere of acceptance in groups (1.0)	*Can solve problems (.34)
Can select alternatives (.72)	*Can use information to solve problems (.33)
*Trust other people (.72)	Have a positive self-concept (.17)
*Can solve problems (.71)	Consider the needs of others (.17)
Can be honest with others (.57)	Can handle mistakes (.17)
*Can use information to solve problems (.57)	*Can be flexible (.17)
*Can be flexible (.57)	*Trust other people (.17)

The intern's perceived skill gain for each of the 30 items was also assessed. The greatest perceived gains were seen on the following items:

1994	1995
*Can use information to solve problems (2.86)	*Can use information to solve problems (2.67)
Can be flexible (2.86)	Can determine needs (2.50)
*Can set goals (2.71)	Can express feelings (2.33)
Can handle mistakes (2.71)	*Can set goals (2.33)
Am open-minded (2.57)	Can delegate responsibility (2.33)
Show a responsible attitude (2.57)	Am open-minded (2.33)
Can solve problems (2.57)	Consider input from all group members (2.33)

Perceived skill gain was deemed important since leadership development was identified as an important overall objective of the project. Although a general assumption prevails that increased practice (frequency) leads to skill development, the number of times a skill is actually conducted does not necessarily lead to the intern's perceived skill gain or competency in the specific task. For both 1994 and 1995, only one item, using information to solve problems, appeared among the top seven items on the frequency increase and perceived gain lists.

A demographic variable which may partially explain the differences in the outcome of the Youth Leadership Life Skills Development Scale, is age. The mean age of the interns in 1994 was 23.7 years. In 1995, the interns included more older, returning students, and the mean age was 32.7 years. The nine year difference may account for greater maturity and life and leadership experiences,

[3] * identifies items which appeared in both 1994 and 1995.

and consequently the response to the leadership scale was different. The one item which appeared among the top seven for all lists and for both 1994 and 1995, was using information to solve problems. This also relates directly to the mission of the Cooperative Extension Service.

Project Evaluation

During the post-experience seminar, interns completed an overall evaluation of the "Building Bridges" Leader-Mentor Project. Thirty-four components and sub-components relating to promotion, application and selection, orientation, leadership seminar, Intern Experience and Mentor Notebooks, university program personnel support, required internship activities, and the post-experience seminar were rated. For 1994 and 1995 a summary of the ratings for the 34 components revealed that 51 percent of the responses thought the activities were very valuable, and 33 percent thought they were valuable. Only 15 percent of the responses indicated that some activities were only somewhat valuable. The only component perceived by the interns to have minimal value to the interns was the Mentor Handbook. It can be noted that the intern had limited exposure to the Mentor Handbook.

Mentors also completed an overall evaluation. A questionnaire similar to the one completed by the interns was mailed to the mentors at the conclusion of the eight-week field experience. Mentors rated the value of each of the project components. Of the responses to the components both years, 54 percent were found to be very valuable and 37 percent were valuable. Only eight percent of the different components were perceived as only somewhat valuable. Less than one percent of the components rated by mentors were perceived as not being valuable and they were components that the mentors were not exposed to such as the on-campus advertising of the internships and the Intern Reference Notebook.

In addition to a rating for each of the components, mentors and interns provided written comments. A few comments related to some of the components include:

Promotion:	"I noticed the posters on the hallway bulletin board my first semester." (I)
	"Well done, and thoroughly explained the program." (M)
Orientation:	"You told us exactly what you expected." (I)

Leadership Seminar:	"This was great!" (I) "I think these are skills everyone needs!" (I) "Gave us a good indication of what to expect." (I)
Intern Notebooks:	"Notebook was an asset in program planning."(I) "They were well put together and quite helpful." (M)
University Support:	"It was important to know I was supported by someone back home at all times." (I) "Very affirming for both of us." (M)
Required Activities:	"Helped me to see the variety agents encounter." (I) "Showed me the values of networking." (I) "They gave a great overview of extension activities." (M) "It was good to see the process of preparing, planning and executing (leadership training). We all do this so informally - good refresher. (M)

Additionally, mentors and interns were asked to rate the required activities for each of the project objectives in terms of the **quantity** of work expected. Ninety- three percent of the mentors' responses and ninety-one percent of the interns' responses indicated the quantity of the work expected was about right. Only five percent of the mentors' responses and five percent of the interns' responses noted the expectations were too little, and less than one percent of the mentors' responses and four percent of the interns' responses believed the expectations were too much. Comments collected regarding the quantity of work expected supported these findings. Overall, mentors and interns were pleased with the quantity of work expected to achieve program objectives during the eight-week field experience. In some cases, interns felt they would have benefitted from more required activities. Mentors and interns also shared opinions regarding their value of the overall program, program continuation and suggestions and ideas for improvement. An analysis of comments supports the following conclusions:

1. Mentors indicated this was a valuable opportunity for professional growth and renewal.

- "This experience renewed my enthusiasm for the job."
- "I love to share my enthusiasm for my job with others. I had to stretch personally to work with and train a student who was very different than myself -- from a different background."
- "A breath of fresh air. A chance to reflect upon our own philosophies and programming. Rewarding to know you might make a difference in the future of your organization."
- "A good mentor will always learn from the student."

2. Students indicated this was a very valuable career awareness activity.

- "This helps me be better marketed for a job in the future!"
- "I feel my future leads to working in Extension. I found the internship invaluable."
- "It gave me a good idea of how CES works and allowed me to make up my mind about what I want to pursue in the future."

3. The internship provided personal and professional development.

- "I could not have gotten the confidence and experience doing anything else."
- "It gave me valuable work experience in the field I want to work in."
- "I gained a lot of maturity and self-confidence."
- "It gave me the opportunity to "get my feet wet", to try out some of the skills I've learned in the classroom. Being in a "professional" position boosted my confidence and made me realize what I have to look forward to."

4. Professional contacts and linkages with mentors were considered an asset.

- "I made good contacts and began an interaction with the CES."
- "The many contacts made have been interesting and will be valuable in our future."
- "The students were exposed to a large number of other related occupations."

5. A definite interest in continuation of the program was identified.

- "I would gladly recommend this program "
- "Congratulations for a great program and thanks for letting us be a part of it. CHOOSE ME, AGAIN."
- "Thanks, it was a great experience!"
- "Just do it! It is money well spent and an experience missed if you don't do it. I feel that this is a positive step in training agents for a future in Extension."

RECOMMENDATIONS

A summary of qualitative and quantitative data indicate that mentors and interns perceived the project as a successful experience. Recommendations for improvement or changes sought from mentors and interns were minimal.

Mentors have a critical role in the overall success of the experience. One recommendation supported strengthening the mentor orientation. Mentors participated in an orientation meeting in conjunction with another professional development activity. This required fitting in the mentor orientation into an already full agenda. Although no serious concerns developed, it was perceived that a more intensive mentor orientation would further clarify questions and overall strengthen the experience.

The pilot effort of this project was perceived to be successful. It is recommended that the project be replicated in New Mexico and in other states using the Cooperative Extension Service as a model. Since the project was designed to address professional competencies and characteristics in a variety of food and agriculture careers, it is recommended that the project be replicated using other careers as the intern experience. The curriculum materials including the Mentor Handbook, the Intern Experience Notebook and evaluation tools can be easily adapted to a variety of internship settings.

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